
STORY & CHARACTER

In Virtual Environments
Larry Tuch



STORYTELLING In Virtual Environments

- Story and Character

Project: Mission Rehearsal Exercise

- Immersive Story Elements

Project: Sensory Environments Evaluation (SEE)



MISSION REHEARSAL EXERCISE

Project Director:
William Swartout, Ph.D.
Director of Technology, USC ICT



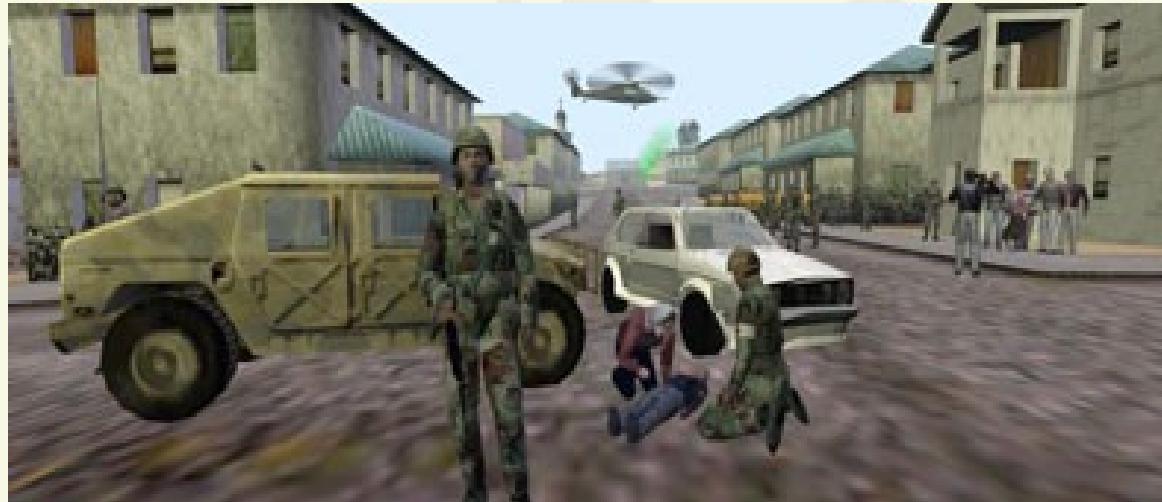
ICT VR Theater Environment



- 30'X8' Curvilinear Screen
- 3 Barco 909 projectors
- SGI Onyx Reality Monster IR3
- Multi-Paradigm Vega software
- 10.2 channel surround sound



Mission Rehearsal Exercise



Peacekeeping Mission - Bosnia



Mission Rehearsal Exercise



Platoon Leader trainee must...
Solve problems under pressure
Interact with Virtual Platoon Sergeant (Artificially Intelligent Agent)



STORY AND CHARACTER

Mission Rehearsal Exercise

Story requirements

- Present a **realistic** peacekeeping scenario
- Include a strong **emotional** component
- Pose a **dilemma** for the officer in charge
- Employ simple **story structure**
- **Branch** to a good or bad outcome



Story Requirements

- Realistic scenario
- U.S. Platoon is surrounded by hostile crowd at armory. Calls for assistance.



Story Requirements

- Realistic scenario
- Emotional component
- U.S. Platoon is surrounded by hostile crowd at armory. Calls for assistance.
- Child injured in collision with Humvee from relief platoon.



Story Requirements

- Realistic scenario
- Emotional component
- Dilemma
- U.S. Platoon is surrounded by hostile crowd at armory. Calls for assistance.
- Child seriously injured in collision with Humvee from relief platoon.
- Send half the platoon forward to reinforce platoon at armory or maintain mass.



Story Synopsis

- **ACT 1: The Set up**
 - Act 1 Climax: Spins story in new direction
 - On way to assist trapped PLT
 - Accident



Story Synopsis

- **ACT 1: The Set up**
 - Act 1 Climax: Spins story in new direction
- **ACT 2: Progressive Complications**
 - Protagonist faces complications, struggles against obstacles.
 - Act 2 Climax: Medevac aborted. Raises stakes ("All is lost")
- On way to assist trapped PLT
- Accident
- PLT LDR works to Medevac boy
 - Boy's condition gets worse.
 - Crowd gets volatile
 - Security dilemma
- *Explosion near landing zone; Medevac chopper can't land.*



Story Synopsis

- **ACT 1: The Set up**
 - **Act 1 Climax:** Spins story in new direction
- **ACT 2: Progressive Complications**
 - Protagonist faces complications, struggles against obstacles.
 - **Act 2 Climax:** Medevac aborted. Raises stakes ("All is lost")
- **ACT 3: The Resolution**
 - **Crisis-Decision:** PLT LDR sends 1 squad forward.
 - **Crisis-Decision:** PLT LDR sends 2 squads forward.
- On way to assist trapped PLT
- **Accident**
- Lieut. works to Medevac boy
 - Boy's condition gets worse.
 - Crowd gets volatile
 - Security dilemma
- ***Explosion near landing zone; Medevac chopper can't land.***
- **Climax:** Success. PLT LDR has enough troops to re-secure the LZ and accident site.
- **Climax:** Failure. Not enough troops.



Casting Session

- **Roles: How characters function in the Story**
 - **Catalyst/facilitator (Platoon Sgt.)**
 - **Emotional Component (Mother)**
 - **Bit Player (Combat Lifesaver)**



Facilitator: The Platoon Sergeant

Roles

- “Reporter”
- Extension (actions) of PLT LDR/protagonist
- Advisor/Coach

Actions

- Provides background on situation.
- Executes PLT LDR's orders
- Advises re: good vs. bad courses of action (establishes decision pt.)



Emotional Prod: The Mother

Her Emotional Arc...

- Immediate aftermath of the accident
- PLT LDR arrives
- Squad(s) are ordered to move forward.
- Medevac chopper approaches

- Guilt, State of shock
- Guarded hope
- **PEAK OF ARC**: Assumes platoon is leaving. Exhorts PLT LDR To stay. Stirs up crowd.
- Calms down, re-focuses on her son.



Reporter: The Combat Lifesaver

- **Function: A window on the boy's deteriorating condition**
 - Reports boy's current condition when asked by Lieutenant.
- **Character elements**
 - Need/Agenda: Get boy evacuated ASAP.
 - Emotional driver: Has exhausted skills, is stressed by boy's deteriorating condition and mother's grief.
- **Task Model**
 - Diagnose boy's condition (continuous, progressive).
 - Stabilize boy's condition (standard actions).
- **Actions**
 - Comfort mother, press LDR LDR to order Medevac.



Sensory Environments Evaluation (SEE)



**Project Director: Jacqueline Morie
Creative Manager
USC Institute for Creative
Technologies**



Sensory Environments Evaluation (SEE)

How can sensory inputs be best utilized to have the maximum effect on emotional engagement?



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How can sensory inputs be best utilized to have the maximum effect on emotional engagement?



The SEE Experience



An exploratory, navigable
environment



SEE Story Requirements

- Present a **realistic** military scenario.
- Create an **exploratory** line of action.
- Provide a **structure** for presenting specific sensory elements that makes “story sense.”
- Create story **elements that engage** the participant.



SEE Story Background

- **Long Range Surveillance Unit (LRSU) Mission.**
- **Location: The Balkans**
- **Mission: Locate sites where paramilitary groups are stockpiling illegal weapons.**



SEE Story Elements

Desired effects

- Engagement
- Immersion
- Sense of Jeopardy

Approach

- ➲ On-screen briefing focuses the participant on the mission and its objective.
- ➲ Details planted in the environment and events triggered by participant.



SEE Story Elements

- **The Corroborative Detail**

- Object, action, or spoken words.
- Expresses a fundamental reality about a person, place or situation.
- Makes that reality vivid.



SEE Story Elements

- **The Corroborative Detail**

- Object, action, sound or spoken words.
- Expresses a fundamental reality about a person, place or situation.
- Makes that reality vivid.

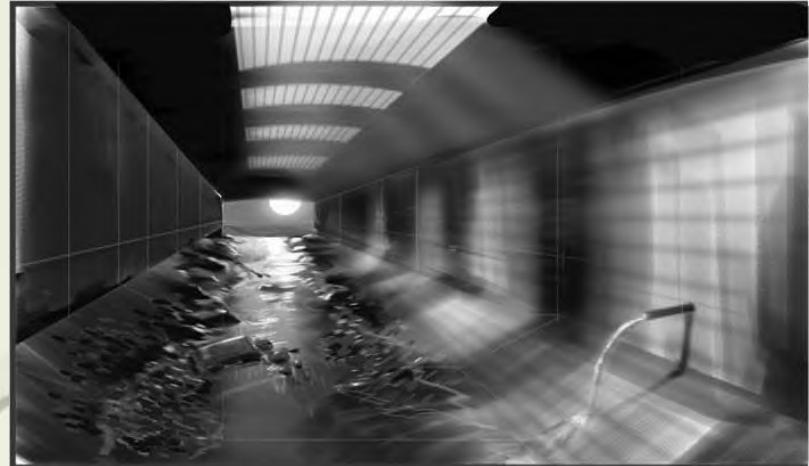
- **Examples**

- Sound (Saving Private Ryan): Impact of rounds on tank traps.
- Action (The New Centurions): Early in the story, officer is wounded in the stomach. Later, as he closes in on an armed suspect, he uses his helmet to protect his stomach.



SEE Story Elements

- **The Corroborative Detail - effects.**
 - Engages the participant's curiosity.
 - Allows him to read the environment.
 - Can evoke a strong emotional response or association.
 - Can create a sense of anticipation or danger.



SEE Story Elements

- **Triggered Events**
 - Linked to specific locations.
 - Triggered by participant's approach.
 - Pose a challenge or threat.
 - Example: Challenge
 - Participant's view suddenly obstructed. He must seek new vantage point without being detected.



SEE Story Elements

- **Triggered Events**
 - Example: Threat
 - ★ *Surprise*
 - ★ *Jeopardy*

Risk of Mission failure is raised in peak moments



The Participants' Experience

- **A deeply immersive environment**
 - Through a rich mix of simulation technologies
- **An emotionally engaging challenge**
 - Through Hollywood techniques of story and character development.

Placing them Inside the movie...

Making it their story...

Making them the main characters.



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